

Docket No. AUS920010186US1

**CLAIMS:**

What is claimed is:

1. A method for providing metadata, comprising:  
creating an object descriptor class for an object;  
5 providing an object descriptor interface using the  
object descriptor class;  
using methods defined by the object descriptor  
interface to identify a property of the object;  
creating a property descriptor class for the  
10 property of the object;  
providing a property descriptor interface using the  
property descriptor class; and  
using methods defined by the property descriptor  
interface to obtain metadata associated with the  
15 property.
2. The method of claim 1, wherein the object descriptor  
interface extends a property set descriptor interface.
3. The method of claim 2, wherein the property set  
descriptor interface contains the property descriptor  
20 interface.
4. The method of claim 1, wherein the property  
descriptor interface defines methods that describe a  
single property.
5. The method of claim 1, wherein the object descriptor  
25 interface collects multiple associated property  
descriptions into a single object description.

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6. The method of claim 1, wherein the object is a database.

7. The method of claim 6, wherein the step of using methods defined by the object descriptor interface to identify a property of the object comprises using application program interfaces that talk to the database.

8. The method of claim 1, wherein the object is a Java bean.

9. The method of claim 8, wherein the step of using  
10 methods defined by the object descriptor interface to  
identify a property of the object comprises using a  
built-in object introspection mechanism.

10. A method for providing metadata about a set of properties comprising:

15       creating a first object describing metadata for a  
plurality of data sources, wherein the first object  
stores a related set of properties; and  
          creating a set of second objects describing metadata  
for respective properties of the data sources;  
20       wherein dynamically defined metadata concerning a  
respective property is obtained by invoking a method in a  
respective one of the second objects.

11. The method of claim 10, wherein the first object and the set of second objects comprise interface objects.

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12. The method of claim 10, wherein each object in the set of second objects defines methods that describe a single property of a data source.

13. The method of claim 10, wherein the first object  
5 collects multiple associated property descriptions into a single description.

14. An apparatus for providing metadata, comprising:  
first creation means for creating an object  
descriptor class for an object;  
10 first implementation means for providing an object descriptor interface using the object descriptor class;  
first exposing means for using methods defined by the object descriptor interface to identify a property of the object;  
15 second creation means for creating a property descriptor class for the property of the object;  
second implementation means for providing a property descriptor interface using the property descriptor class;  
and  
20 second exposing means for using methods defined by the property descriptor interface to obtain metadata associated with the property.

15. The apparatus of claim 14, wherein the object  
descriptor interface extends a property set descriptor  
25 interface.

16. The apparatus of claim 15, wherein the property set descriptor interface contains the property descriptor interface.

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17. The apparatus of claim 14, wherein the property descriptor interface defines methods that describe a single property.

18. The apparatus of claim 14, wherein the object  
5 descriptor collects multiple associated property descriptions into a single object description.

19. The apparatus of claim 14, wherein the object is a database.

20. The apparatus of claim 19, wherein the first  
10 exposing means comprises means for using application program interfaces that talk to the database.

21. The apparatus of claim 14, wherein the object is a Java bean.

22. The apparatus of claim 21, wherein the first  
15 exposing means comprises means for using a built-in object introspection mechanism.

23. An interface for defining metadata about a related set of properties comprising:

20 a first object describing metadata for a plurality of data sources, wherein the first object stores a related set of properties; and

a set of second objects describing metadata for respective properties of the data sources.

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24. The interface of claim 23, wherein the first object and the set of second objects comprise interface objects.

25. The interface of claim 23, wherein each object in the set of second objects defines methods that describe a  
5 single property of a data source.

26. The interface of claim 23, wherein the first object collects multiple associated property descriptions into a single description.

27. A computer program product, in a computer readable  
10 medium, for defining metadata, comprising:

instructions for creating an object descriptor class for an object;

instructions for providing an object descriptor interface using the object descriptor class;

15 instructions for using methods defined by the object descriptor interface to identify a property of the object;

instructions for creating an property descriptor class for the property of the object;

20 instructions for providing a property descriptor interface using the property descriptor class; and

instructions for using methods defined by the property descriptor interface to obtain metadata associated with the property.

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